

This listing of claims will replace all prior versions,
and listings, of claims in the application:

Claims 1-10 (canceled)

1 Claim 11 (new): Sensor for transmission measurement in a
2 washing machine or dishwasher with:
3 - a carrier (2, 104),
4 - a transmitter (4, 106) attached to the carrier
5 (2, 104) to emit a transmitter beam (8),
6 - a receiver (6, 108) attached to the carrier (2,
7 104) to receive the beam generated by the
8 transmitter (4, 106), and
9 - a diaphragm system (12, 128) arranged on the
10 carrier (2, 104) spaced from the transmitter (4,
11 106), with a transmitter diaphragm (14, 130)
12 arranged in the beam path of the transmitter beam
13 in order to generate a measurement beam (18)
14 aligned to the receiver (6, 108).

1 Claim 12 (new): Sensor for transmission measurement in a
2 washing machine or dishwasher with:
3 - a carrier (2, 104),
4 - a transmitter (4, 106) attached to the carrier
5 (2, 104) to emit a transmitter beam (8),
6 - a receiver (6, 108) attached to the carrier (2,
7 104) to receive the beam generated by the
8 transmitter (4, 106), and
9 - a diaphragm system (12, 128) arranged on the
10 carrier (2, 104) spaced from the receiver (6, 108)
11 with a receiver diaphragm (16, 132) arranged in
12 the beam path of the transmitter beam (8) to

13 generate a reception beam aligned to the receiver
14 (6, 108).

1 Claim 13 (new): Sensor for transmission measurement in a
2 washing machine or dishwasher with:
3 - a carrier (2, 104),
4 - a transmitter (4, 106) attached to the carrier (2,
5 104) to emit a transmitter beam (8),
6 - a receiver (6, 108) attached to the carrier (2,
7 104) to receive the beam generated by the
8 transmitter (4, 106) and
9 - a diaphragm system (12, 128) arranged on the
10 carrier (2, 104) spaced from the transmitter (4,
11 106) and receiver (6, 108) with a transmitter
12 diaphragm (14, 130) arranged in the beam path of
13 the transmitter beam (8) to generate a measurement
14 beam (18) and with a receiver diaphragm (16, 132)
15 arranged in the beam path of the measurement beam
16 (18) to generate a reception beam aligned to the
17 receiver (6, 108).

1 Claim 14 (new): Sensor according to claim 11 in which
2 the carrier (2, 104) has a first leg (114) on which
3 the transmitter (4, 106) is arranged and a second
4 leg (116) on which the receiver (6, 108) is arranged
5 opposite the transmitter (4, 106).

1 Claim 15 (new): Sensor according to claim 11, in which
2 the carrier (2, 104) comprises legs (114, 116) which
3 are of different lengths and on the free end (120)
4 of the longer leg (116) of the carrier (2, 104) is
5 arranged a temperature sensor (122).

1 Claim 16 (new): Sensor according to claim 11, in which
2 the diaphragm system has a first diaphragm system
3 leg which holds the transmitter diaphragm (14, 130).

1 Claim 17 (new): Sensor according to claim 12 in which
2 the carrier (2, 104) has a first leg (114) on which
3 the transmitter (4, 106) is arranged and a second
4 leg (116) on which the receiver (6, 108) is arranged
5 opposite the transmitter (4, 106).

1 Claim 18 (new): Sensor according to claim 12, in which
2 the carrier (2, 104) comprises legs (114, 116) which
3 are of different lengths and on the free end (120)
4 of the longer leg (116) of the carrier (2, 104) is
5 arranged a temperature sensor (122).

1 Claim 19 (new): Sensor according to claim 12, in which
2 the diaphragm system has a first diaphragm system
3 leg which holds the transmitter diaphragm (14, 130).

1 Claim 20 (new): Sensor according to claim 13 in which
2 the carrier (2, 104) has a first leg (114) on which
3 the transmitter (4, 106) is arranged and a second
4 leg (116) on which the receiver (6, 108) is arranged
5 opposite the transmitter (4, 106).

1 Claim 21 (new): Sensor according to claim 13, in which
2 the carrier (2, 104) comprises legs (114, 116) which
3 are of different lengths and on the free end (120)
4 of the longer leg (116) of the carrier (2, 104) is
5 arranged a temperature sensor (122).

1 Claim 22 (new): Sensor according to claim 13, in which
2 the diaphragm system has a first diaphragm system
3 leg which holds the transmitter diaphragm (14, 130).

1 Claim 23 (new): Sensor according to claim 12, in which
2 the diaphragm system has a second diaphragm system
3 leg which holds the first receiver diaphragm (16,
4 132).

1 Claim 24 (new): Method for production of a sensor to
2 measure the transmission of a fluid in a washing
3 machine or a dishwasher with the following steps:
4 - provision of a carrier,
5 - provision of a transmitter to emit a transmitter
6 beam,
7 - provision of a receiver to receive a reception
8 beam,
9 - provision of a diaphragm system with a
10 transmitter diaphragm,
11 - attachment of the transmitter and receiver on the
12 carrier, and
13 - arrangement of the diaphragm system on the
14 carrier so that the diaphragm system is spaced
15 from the transmitter and the transmitter
16 diaphragm is arranged in the beam path of the
17 transmitter beam in order to generate a
18 measurement beam aligned to the receiver.

1 Claim 25 (new): Method for production of a sensor to
2 measure the transmission of a fluid in a washing
3 machine or a dishwasher with the following steps:

- 4 - provision of a carrier,
- 5 - provision of a transmitter to emit a transmitter
- 6 beam,
- 7 - provision of a receiver to receive a reception
- 8 beam,
- 9 - provision of a diaphragm system with a receiver
- 10 diaphragm,
- 11 - attachment of the transmitter and receiver on the
- 12 carrier, and
- 13 - arrangement of the diaphragm system on the
- 14 carrier so that the diaphragm system is spaced
- 15 from the transmitter and the receiver diaphragm
- 16 is arranged in the beam path of the transmitter
- 17 beam in order to generate a reception beam
- 18 aligned to the receiver.

1 Claim 26 (new): Method for production of a sensor to
2 measure the transmission of a fluid in a washing
3 machine or a dishwasher with the following steps:
4 - provision of a carrier,
5 - provision of a transmitter to emit a transmitter- 6 beam,
- 7 - provision of a receiver to receive a reception
- 8 beam,
- 9 - provision of a diaphragm system with a
- 10 transmitter diaphragm and a receiver diaphragm,
- 11 - attachment of the transmitter and receiver on the
- 12 carrier, and
- 13 - arrangement of the diaphragm system on the
- 14 carrier so that the diaphragm system is spaced
- 15 from the transmitter and the receiver, the
- 16 transmitter diaphragm is arranged in the beam

17 path of the transmitter beam in order to generate
18 a measurement beam and the receiver diaphragm is
19 arranged in the beam path of the measurement beam
20 to generate a reception beam aligned to the
21 receiver.